# **EXHIBIT A**

**Declaration of Isabelle SCHLOSSER** 



PATENT Attorney Docket No. 06028.0036-00

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

François COTTARD et al.

Application No.: 10/728,888

Application No.: 10/728,888

Filed: December 8, 2003

For: COMPOSITION FOR THE OXIDATION
DYEING OF KERATIN FIBERS, COMPRISING
AT LEAST ONE NON-OXYALKENYLATED
FATTY ALCOHOL, AT LEAST ONE
OXIDATION DYE, AT LEAST ONE
ASSOCIATIVE POLYMER, AND AT LEAST
ONE AMIDE OF AN ALKANOLAMINE AND A

OXIDATION DYE, AT LEAST
ONE AMIDE OF AN ALKANOLAMINE AND A

### MAIL STOP AMENDMENT

C14-C30 FATTY ACID

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

### DECLARATION UNDER 37 C.F.R. § 1.132

- I, Isabelle SCHLOSSER, declare and state that:
- 1. I am a French citizen, residing at 8 rue de Chantilly, 75009 Paris,

France.

- 2. I am an agronomist engineer from the Institut National Agronomique Paris-Grigon (INAPG), France.
- 3. I have been employed by L'OREAL since 1991, and I am presently a research engineer. During my employment at L'OREAL, I have been engaged in research and development regarding hair dyeing.

4. Given my education and experience, particularly in the area of hair dyeing, I consider myself able to provide the following testimony based on experiments conducted by me or under my direct supervision.

### **COMPARATIVE TESTING**

- 5. Comparative intensity testing was performed with three compositions: Inventive Composition B and Comparative Compositions A and C. Inventive Composition B was prepared according to the present invention, comprising, in particular, at least one oxidation dye, at least one non-oxyalkylenated fatty alcohol, at least one associative polymer, and at lease one amide of an alkanolamine and a C<sub>14</sub>-C<sub>30</sub> fatty acid selected from those listed in claim 1, and wherein the ratio by weight of the at least one amide of an alkanolamine and a C<sub>14</sub>-C<sub>30</sub> fatty acid to the at least one associative polymer ranges from 5 to 20.
- 6. Comparative Composition A was prepared according to the invention of Cottard, comprising, in particular, at least one oxidation dye, at least one non-oxyalkylenated fatty alcohol, at least one associative polymer, and a monoisopropanolamide of coprah acids. The coprah acid consists of a mixture of C<sub>8</sub>, C<sub>10</sub>, C<sub>12</sub>, C<sub>14</sub>, C<sub>16</sub>, and C<sub>18</sub> fatty acids. In particular, the coprah acid consists of 36.7% by weight of C<sub>14</sub>, C<sub>16</sub>, and C<sub>18</sub> fatty acids. Thus, the ratio by weight of the at least one amide of an alkanolamine and a C<sub>14</sub>-C<sub>30</sub> fatty acid to the at least one associative polymer is lower than 5 (specifically, the weight ratio is 4.89).
- 7. Comparative Composition C was prepared according to the claimed invention, with the exception that instead of the ratio by weight as claimed ranging from 5 to 20, the ratio by weight of the at least one amide of alkanolamine and a C<sub>14</sub>-C<sub>30</sub> fatty

acid to the at least one associative polymer is lower than 5 (specifically, the weight ratio is 4.37).

# I. COMPOSITIONS

8. The test compositions are summarized in the following table and described in detail below. The amounts are expressed as percentage by weight.

Ingredients	A Comparative	B Inventive	C Comparative
Oxyethylenated (2EO) stearylic alcohol	8	8	8
Oxyethylenated (21EO) stearylic alcohol	5	5	5
Slycerol	3	3	3
Dieic acid	2	2	2
Dieic alcohol	1.8	1.8	1.8
Monoisopropanolamide of coprah acids (Empilan CIS)	4 g% (*)	-	-
Monoethanolamide of stearic acids (Mackamide SMV)	•	4 g% (*)	3.5 g% (*)
Quaternized hydroxyethyl cellulose with lauryldimethylammonium epoxyde (Quatrisoft LM 200) (quaternized hydroxyethylcelluloses modified by at least C <sub>8</sub> -C <sub>30</sub> fatty chain)	0.3 g% (*)	0.3 g% (*)	0.8 g% (*)
Tetramethyl hexamethylenediamine / dichloro-1,3-propylene polycondensate in aqueous solution (Mexomere PO)	3	3	3
Copolymer dimethyldiallylammonium chloride / acrylic acid (80/20) (Merguat 280)	3	3	3
Pentasodium salt of diethylenetriamine- pentacetic acid in 40% aqueous solution	2	2	2
Ammoniac thiolactate in 58% aqueous solution	0.8	0.8	0.8
I-3-Dihydroxybenzene (Resorcinol)	0.011	0.011	0.011
1,4-diaminobenzene	0.31	0.31	0.31
3-aminophenol	0.035	0.035	0.035
4-(methylamino)phenol hemisulfate salt	0.43	0.43	0.43
4-aminophenol	0.53	0.53	0.53

1-methyl-2-hydroxy-4-β- hydroxyethylaminobenzene	1.07	1.07	1.07
1-methyl-2-hydroxy-4-aminobenzene	0.12	0.12	0.12
Ammoniac (20% in NH <sub>3</sub> )	8	8	88
Water	qsp 100%	qsp 100%	qsp 100%
Weight ratio of an alkanolamide and a C <sub>14</sub> -C <sub>30</sub> fatty acid / associative polymer	4.89 (<5)	13.33 (5-20)	4.37 (<5)

(\*) expressed as percentage by weight of active material

#### II. <u>DYEING PROCESS</u>

- 9. Each composition was mixed, at the time of use, with an oxidizing composition consisting of 20 volumes aqueous hydrogen peroxide oxygen (6% by weight) of pH 2.4 in an amount of 1 part of dyeing composition per 1.5 parts of oxidizing composition.
  - 10. The viscosity is measured for each resulting mixture.
- 11. Then, the mixture obtained was applied to locks of natural grey hair which is 90% white and left in for 30 minutes. The locks were then rinsed with water, washed with standard shampoo, again rinsed with water, and then dried.

#### III. VISCOSITY

12. The viscosity of each mixture is determined with a Rheomat 180 (Rheometric Scientific) at 25°C and the results are given in Table (I) below.

Table (I)

	Α	В	C
	Comparative	Inventive	Comparative
Viscosity (centipoise)	590	1160	700

13. The results in Table I show that the viscosity of each composition after being mixed with the oxidizing composition is significantly higher in the case of Inventive Composition B compared with Comparative Composition A and Comparative Composition C.

#### IV. INTENSITY

- 14. The color of the hair was determined by using the L\*a\*b\* system, with a Spectraflash SF600X Datacolor® colorimeter. In the L\*a\*b\* system, the three parameters denote respectively the intensity (L\*), the shade (a\*), and the saturation (b\*). a\* and b\* indicate two color axes, a\* indicates the green/red color axis and b\* the blue/yellow color axis. Values close to zero for a\* and b\* correspond to grey shade. According to this system, the higher the value of L\*, the lighter and less intense the color. Conversely, the lower the value of L\*, the deeper or more intense the color.
  - 15. The results of L\* are given in Table (II) below.

Table (II)

	A	B	C
	Comparative	Inventive	Comparative
L* BN	36.56	27.31	34.97

16. The results in Table (II) show that the L\* value is significantly lower in the case of Inventive Composition B, compared with Comparative Composition A and Comparative Composition C. In other words, the results of Table (II) show that the resulting hair color is significantly more intense or deeper in the case of Inventive

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Composition B, compared with Comparative Composition A and Comparative Composition C.

- From these results, one skilled in the art can objectively conclude 17. that the claimed cosmetic compositions, which comprise at least one oxidation dye, at least one non-oxyalkylenated fatty alcohol, at least one associative polymer, and at least one amide of an alkanolamine and a C<sub>14-30</sub> fatty acid selected from those listed in claim 1, wherein the ratio by weight of the at least one amide of an alkanolamine and a C<sub>14-</sub>C<sub>30</sub> fatty acid to the at least one associative polymer ranges from 5 to 20, lead to an unexpected improvement in viscosity and intensity in comparison with cosmetic compositions wherein the ratio by weight of the at least one amide of an alkanolamine and a C<sub>14</sub>-C<sub>30</sub> fatty acid to the at least one associative polymer is lower than 5.
- I further declare that all statements made herein of my own 18. knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Dated: 21 juni 2007